

UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

S

PLANS ~~Shasta~~ *Klamath*

Timber Management

Goosenest Working Circle

Mount Shasta, California

March 12, 1952

STREAMLINED MANAGEMENT PLAN

GOOSENEST WORKING CIRCLE

SHASTA NATIONAL FOREST



TRANSFERRED

TIMBER MANAGEMENT

COPY

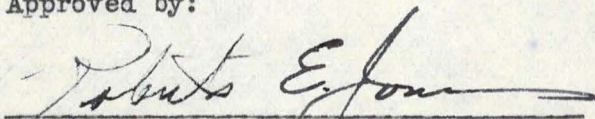
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PLANS - Shasta
Timber Management
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Mount Shasta, California
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STREAMLINED MANAGEMENT PLAN
GOOSE NEST WORKING CIRCLE
SHASTA NATIONAL FOREST

Approved by:

Submitted By:


Roberts E. Jones, Forest Supervisor
5-6, 1952


C. A. Abell, Dist. Forest Ranger


V. S. Brown, Forester

B. H. Payne

~~Assistant~~ Regional Forester **ACTING**
January 22,, 1952³

TIMBER MANAGEMENT
[Stamp]

cc. Chief 1/23/53

S
 PLANS - Shasta
 Timber Management
 Goose Nest Working Circle

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STREAMLINED MANAGEMENT PLAN
 GOOSE NEST WORKING CIRCLE

1. Resource Data

Ownership Within Working Circle

| | |
|-------------------|---------------|
| <u>Total Area</u> | 372,078 Acres |
| National Forest | 244,491 " |
| Public Domain | 4,853 " |
| Private | 122,734 " |

Classes of Land, National Forest Area*

| | |
|------------------------|---------------|
| <u>Total Area</u> | 244,491 Acres |
| Productive Forest Land | 175,175 " |
| Less than 5% Stocked | 40,169 " |
| Non-Commercial Land | 29,147 " |

Stand on National Forest Area*

| | | |
|--------------|---------------|---------------|
| <u>Total</u> | 709,220 M ft. | 175,175 Acres |
| Virgin | 259,220 " | 22,618 " |
| Cut-Over | 450,000 " | 152,557 " |

Volumes on National Forest Uncut Areas

| | |
|----------------|----------------|
| <u>Total</u> | 259,220 M feet |
| White Pine | 225 " |
| Ponderosa Pine | 63,899 " |
| Sugar Pine | 874 " |
| White Fir | 99,571 " |
| Douglas Fir | 503 " |
| Red Fir | 94,148 " |

*See Table 2 for distribution of land classes by forest types.

The Goose Nest Working Circle lies on the northern part of the Shasta National Forest. It is traversed by U. S. Highway 97 (from Weed to Klamath Falls) and the main line of the Southern Pacific Railroad. Saw-mills are located at Dorris (Associated Lumber & Box Co.) about 20 miles north, at Weed (two Long-Bell mills) about 20 miles south, and at Montague (two small mills) about 15 miles west. The working circle is mostly

cut over and a large part of the area is understocked. A great deal of land that is now national forest was acquired after cutting by Long-Bell. This company has some timber left but not much, even though their railroad still extends some distance into the Modoc Forest on the east. The Long-Bell mills at Weed cut about 80 million feet per year so there is no chance of sustaining the operation at its present level from the Goose Nest and adjoining Modoc working circles.

One of the more significant facts about the working circle is that only 10 per cent of the national forest land has stand densities of 50 per cent or over.

Forest types on the area, as well as non-productive and non-commercial land are shown on Map 1.

The location of privately owned land and government land is shown on Map 2. Long-Bell land has been shown differently than other private land because, under existing agreements, it will become national forest after the timber is cut.

Map 3 shows the location of the remaining virgin national forest timber, by type, and also indicates which areas are proposed for cutting in each of the next 15 years.

In Table 1 is shown the area of national forest land, by age-density classes and also similar data for private land. The areas in these classes have been adjusted (January 1952) to take account of the cutting that has taken place since the aerial photos (from which age-density areas were determined) were taken. Attention is called to the large proportion of area, both national forest and private, in poorly stocked condition which is indicated by the large figures in density classes 3, 4 and 5.

2. Transportation Situation

Since most of the area has already been logged, those portions at least are pretty well covered by existing roads and railroad grades. Main road development is still needed in upper Butte Creek, Antelope Creek, and in the area south and west of Ball Mountain Lookout. This will be accomplished by operator construction in conjunction with timber sales and the cutting of intermingled private timber.

Where new main roads are constructed in connection with sales, those that will be on the permanent system should have permanent type culverts and drainage installed at the time the road is built. In order to obtain this, some Forest Service financing may be necessary to supplement operator construction.

Other roads should have temporary culverts and fills removed and stream channels restored to natural contour where this is necessary to minimize erosion and protect stream channels.

It is expected that the Long-Bell railroad to the Modoc will be taken up within five years. This is one of the reasons for budgeting the scattered parcels to the east in year 3 because this material would probably be trucked to the railroad.

3. Silviculture

Cutting will be on a partial cut basis aimed at:

- a. Removal of poor risk trees.
- b. Improvement of composition and growing conditions in the stand.
- c. Promoting the establishment of reproduction by natural and artificial means.

Details of the marking systems to be used are fully explained in the Region 5 Timber Management Handbook.

The general aim of management, from the timber standpoint, would be to produce sawlogs, plus any intermediate cutting products such as poles, pulpwood and some Christmas trees. The rotation for sawlog material will probably be between 150 and 200 years.

The disposal of remaining virgin timber is largely a routine sale administration job with the exception of finding methods to obtain more reproduction and, in the northwestern part of the working circle, adopting a modification of cutting practices to prevent excessive windthrow. Recent partial cuttings in this area have resulted in unacceptable losses from wind; the shortage of reproduction is widespread.

On the large area already cut over (most of it acquired since cutting) there are two widespread conditions that prevent full timber production. Much of the area is seriously understocked; also in the mixed conifer type, much area formerly supporting pine is now growing mostly fir or nothing. We should be making progress in remedying these conditions.

4. Allowable Annual Cut

The net annual growth for the national forest land in the working circle is estimated at 10 MM feet. This figure was arrived at by estimating average annual net growth at 60 board feet per acre, using as a guide the results of partial cutting studies at Black's Mountain Experimental Forest. The growth measured at Black's Mountain was 76 feet per acre, net, on a reserve stand of 4,600 board feet after partial cutting. The site was between III and IV. From our field checking and general observation, plus the low densities shown by the aerial photo study, we estimate the average reserve stand on most of the Goose Nest Working Circle to be well below 4,600 feet and the average site closer to IV than to III. Consideration of the generally lower densities, lower reserve volume, and lower site quality in comparison with the area where growth was measured at Black's Mountain, led us to adopt 60 board feet per acre per year as a reasonable estimate of net growth on the working circle.

Since most of the area is cut over, there is no material advantage to establishing a cut in excess of growth for the short period remaining in the first cutting cycle. The allowable annual cut is, therefore, established at 7 MM. To permit some latitude in the operation this cut may be exceeded by not more than 25% in any year, provided the total cut for any 5 year period does not exceed 35 MM feet.

In the event of an exchange of government timber for land and timber within the working circle, the volume of selected timber equivalent to volume acquired by exchange will not be charged against the allowable cut.

The general plan of operation would limit the allowable annual cut, after completion of the first cutting cycle, to something less than annual net growth. Present figures on growth are largely estimates based on experience in other localities. For the purpose of long term management, the estimates of growth should rest on a firm factual basis of local experience. A plan for obtaining this information through permanent sample plots was approved September 8, 1949, S-PLANS-Shasta-Timber Surveys-Goose Nest Working Circle. No progress has been made to date in accomplishing this important work.

5. Sale Policy

Long-Bell is operating in Butte Creek and should finish there within about 5 years. Sales should be made in the Butte Creek area first to facilitate road development on permanent locations, to best serve intermingled ownerships, and to provide a better road system at less cost because unnecessary road construction would be eliminated. If the national forest timber is available at the time the private timber is logged, one road system can be developed for the combined ownerships in a logical and economical fashion.

Development of the road system by the current operator will be advantageous to the government. The annual cut to remove the remaining virgin timber of approximately 7 million feet is judged to be in line with the logging capacity in the area.

Sealed bids will be required in accord with Regional policy (See NF Manual, R-5 Supplement, June 1, 1950).

6. Cutting Budget

The remaining virgin timber has been budgeted over a 15-year period as shown on Map 3. The planned details of the first five year's cutting are shown in Table 3.

TABLE 1

NATIONAL FOREST AND PRIVATE LAND AREAS, BY AGE-DENSITY CLASSESGOOSE NEST WORKING CIRCLE

| Age-Density Class | | National Forest Area | Private Land Area <u>1/</u> |
|---------------------------|------------------|-------------------------|--------------------------------|
| | | Acres | Acres |
| Old Growth | ^{2/} 01 | 408 | 117 |
| | 02 | 779 | 43 |
| | 03 | 96 | - |
| | 04 | 730 | 73 |
| Old Growth - Young Growth | OY1 | 3,070 | 2,196 |
| | OY2 | 5,500 | 5,702 |
| | OY3 | 8,140 | 8,581 |
| | OY4 | 5,630 | 2,036 |
| Young Growth - Old Growth | YO1 | 1,040 | 1,838 |
| | YO2 | 5,200 | 7,349 |
| | YO3 | 22,430 | 12,606 |
| | YO4 | 21,320 | 8,131 |
| Young Growth | Y1 | 790 | 166 |
| | Y2 | 1,598 | 490 |
| | Y3 | 12,637 | 3,842 |
| | Y4 | 55,080 | 12,207 |
| | Y5 | 23,040 | 5,452 |
| Lodgepole - Old Growth | LO | 7,647 | 3,607 |
| | LY | 40 | 103 |
| Total Productive | | 175,175 | 74,539 |
| Less than 5% Stocked | 5 | 40,169 | 9,977 |
| Not Timber Cropland | N | 14,830 | 29,221 |
| | N ^{2/} | 11,763 | 11,920 |
| | N- | 2,554 | 1,930 |
| Total Non-Productive | | 69,316 | 53,048 |
| TOTAL | | 244,491 | 127,587 |

1/ Includes public domain.2/ Numerals indicate density class as follows: 1 = 80% or more of ground space covered by trees; 2 = 50-80%; 3 = 20-50%; 4 = 5-20%; 5 = less than 5%.

MAR 12 1952

TABLE 2

AREA OF NATIONAL FOREST LAND BY TYPES AND CONDITION CLASSESGOOSE NEST WORKING CIRCLE

| Forest Type | : | : | CONDITION CLASS | | | | |
|--------------------|---|---|-----------------|--------|---------|-----------------------|-------------------------------------|
| | | | : | : | : | : | : |
| | | | in Type | Virgin | Cutover | Practically:Unstocked | Non-FOR-est Land:LodgepoleOverstory |
| | | | Acres | Acres | Acres | Acres | Acres |
| Ponderosa Pine | : | : | 119,333 | - | 70,669 | 26,237 | 22,427 |
| Mixed Conifer | : | : | 67,999 | 4,900 | 52,207 | 8,292 | 2,600 |
| White & Shasta Fir | : | : | 57,159 | 17,718 | 21,994 | 5,640 | 4,120 |
| | : | : | | | | | 7,687 |
| All Types | : | : | 244,491 | 22,618 | 144,870 | 40,169 | 29,147 |
| | : | : | | | | | 7,687 |

Goosehost

Working Circle

Klamath

National Forest

Five-year Cutting Budget and Sale Program C.Y. 1955-1956-1957-1958-1959¹⁹⁶⁰ Inclusive.
 (Show all sales under contract and sales proposed for advertising by year.)

| Name of Sale or Proposed Sale & Date of Advertisement | Total Volume in Sale MBM | Estimated Cut for Each C.Y.: | | | Access Road Construction (on System & M-L Roads) | | | | | |
|--|--------------------------------------|------------------------------|-------------------|-------|--|-------|------|----------------|-------|--------|
| | | 1955-1956-1957-1958-1959 | | | Each Year | | | | | |
| | | Year | By Forest Service | | By Operator | | | | | |
| | | | MBM | Acres | Road Number | Miles | Cost | Road Number | Miles | Cost |
| T. 46 N, R 3 W Sec 20 } 21, 22, 23, 27, 28, 29, 32 } | 9.000 | 1956 | 9.000 | 2230 | | | | 4752 | 6.3 | 50,000 |
| T. 43 N, R 2 W S. 34 } | 7.000 | 1957 | 7.000 | 500 | | | | 4467 | 3.5 | 21,000 |
| T 42 N, R 2 W S. 45 } | | | | | | | | | | |
| T 42 N, R 2 W S. 12 } | 6.400 | 1958 | 6.400 | 2942 | | | | | | |
| T 43 N, R 1 W S. 32 } | | | | | | | | | | |
| T 43 N R 1 E S. 1, 11, 12 } | | | | | | | | | | |
| T 44 N R 3 E S. 21, 22, 28, 31, 32, 33 } | | | | | | | | | | |
| T 42 N R 1 W S. 6 } | 7.400 | 1959 | 7.400 | 1842 | | | | 4251 | 4.2 | 25,000 |
| T 42 N R 2 W S. 2, 12 } | | | | | | | | | | |
| T 42 N R 1 W S. 18, 20 } | | | | | | | | | | |
| T 42 N, R 2 W S. 10, 14, 20 } | 6.700 | 1960 | 6.700 | 1600 | | | | | | |

Approved _____

Revised: _____

(Date)

254-R5 Revised 12-27-54
 Supersedes Revision 12-22-53

By: _____

SEP 3 1956

(Show all sales under contract and sales proposed for advertising by year.)

| Map No. | Area | Acres | Value | Notes |
|----------------------|-------|-------|------------|---|
| Pameroy Creek #1 & 2 | 7,000 | 55-56 | 7,000 1900 | 4467(b) 1 \$6,000 |
| Duck Lake #3 | 7,000 | 57 | 7,000 1300 | 4467 (1) 1.2 \$7,000 (2) 1.0 \$6,000 |
| Hart Camp #4 & 5 | 7,000 | 58 | 7,000 2500 | - - |
| Surprise Lake | 7,000 | 59 | 7,000 1000 | 4251 4.2 \$25,000 |

254-R5 Revised 12-27-54
Supersedes Revision 12-22-53

GOOSENEST WORKING CIRCLE

SHA STA. NATIONAL FOREST

FIVE-YEAR CUTTING BUDGET AND SALE PROGRAM (C. Y. '54 to '58 INCLUSIVE)

(Show Sale and Planned Cut By Calendar Year)

| Name of Sale or Proposed Sale | Total Volume in Sale M.B.M. | Estimated Cut by Year | Operator Construction or Major Reconstruc- tion FRD System | Road | Miles | Cost |
|----------------------------------|---|--------------------------|--|------|-------|------|
| L.B.L.Co. (pro) | | | | | | |
| T43N R2W. Sec 2, 3, 34. | 54 | 3,000 900 | - | - | | |
| T42N R2W. Sec. 4, 6, 8 | 7,000 | 55 4,000 1000 | - | 2 | | |
| L.B.L.Co. (pro) | | | | | | |
| T43N R1W. Sec 32 | | | | | | |
| T42N R2W. Sec 12 | | | | | | |
| T42N R1W. Sec. 6 | 7,000 | '56 7,000 1300 | - | 3 | | |
| L.B.L.Co (pro) | | | | | | |
| T42N R2W. Sec. 2, 10, 12 | | | | | | |
| T42N R1W. Sec 18, 20. | 7,000 | '57 7,000 2500 | - | 5 | | |
| L.B.L.Co (pro) | | | | | | |
| T42N R2W. Sec 14, 24. | 7,000 | '58 7,000 800 | - | 3.5 | | |

Revised Jan 15 1954
(Date)

By C.A. Abell.

Title D.R.

A P P E N D I X

Forest Klamath-Goosenest
Working Circle All
Compartment _____

[illegible]

Attachment
January 13, 1956

RECORD OF CUT - SAWTIMBER
(Separate sheet for each unit.)

Forest Klamath - Goosenest
Working Circle ALL
Compartment

1954

[illegible]

TM, RO, February 1, 1952

1/14/55

Exhibit #1

RECORD OF CUT - SAWTIMBER
(Separate sheet for each unit.)

Forest Shasta
Working Circle Goose nest
Compartment

[illegible]

TM, RO, February 1, 1952

Exhibit #2

CUMULATIVE RECORD OF CUT - SAWTIMBER

Forest Shasta

Working Circle Goose Nest

| YEAR | Volume MBM | | | | Acres | | | | Volume MBM | | | | Acres | | | |
|------|------------|--------|------|--------|-------|--------|------|--------|------------|--------|------|--------|-------|--------|------|--------|
| | Cur- | Cumu- | Cur- | Cumu- | Cur- | Cumu- | Cur- | Cumu- | Cur- | Cumu- | Cur- | Cumu- | Cur- | Cumu- | Cur- | Cumu- |
| | rent | lative | rent | lative | rent | lative | rent | lative | rent | lative | rent | lative | rent | lative | rent | lative |
| 1952 | 20 | 20 | 10 | 10 | | | | | | | | | | | | |
| 1953 | 29 | 49 | 25 | 35 | | | | | | | | | | | | |
| 1954 | | | | | | | | | | | | | | | | |
| 1955 | | | | | | | | | | | | | | | | |
| 1956 | | | | | | | | | | | | | | | | |
| 1957 | 1476 | | 110 | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | |

Total Annual Allowable Cut: 7,000 M

TM, RO, February 1, 1952

7x

Forest

Shasta

Working Circle

Goose nest

Compartment

5

1957

3

3

3607

RECORD OF CUT - SAWTIMBER
(Separate sheet for each unit.)

Forest SHASTA
Working Circle GOOSE NEST
Compartment

TM, RO, February 1, 1952

CUMULATIVE RECORD OF CUT - SAWTIMBER

Forest SHASTA
Working Circle GOOSENEST

[illegible]

Total Annual Allowable Cut:

TM, RO, February 1, 1952

*Forest SHASTA
Working Circle GOOSE NEST
Compartment

7

TM, RO, February 1, 1952

OBSOLETE SHEETS

S
PLANS
Timber Management

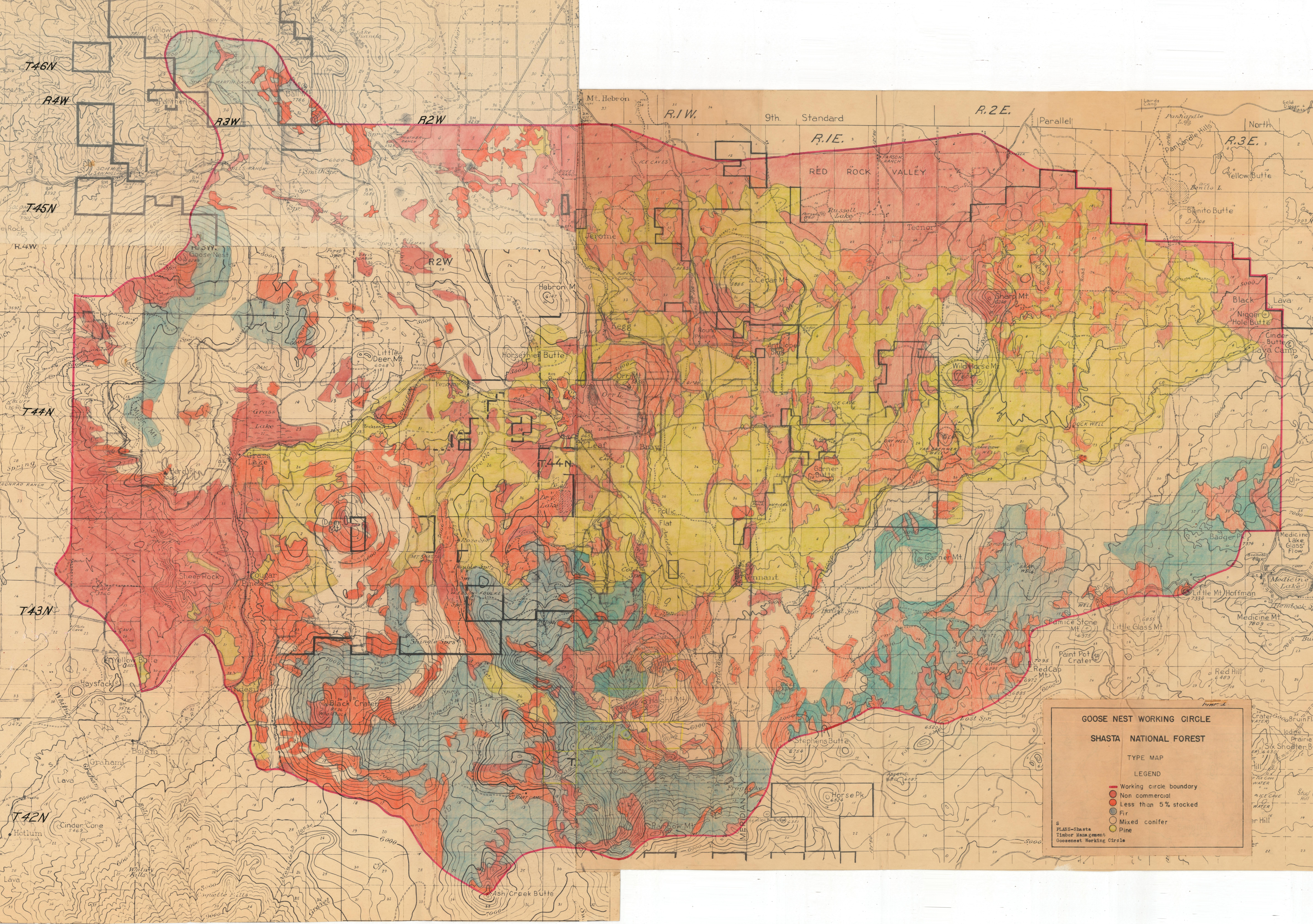
See revision dated 1-15-54

TABLE 3

5 YEAR CUTTING BUDGET

| Number of Map | | TIMBER | | | | | ROADS | | | | | |
|---------------------|---|----------|------|------|-------|----------|--------------------------|----------------|-------|-----------------------------|--|--|
| | | Location | | | Area | Cut Vol. | Responsib. F.S. Oper. | | No. | Miles Const. Better Main | | |
| | | T. | R. | Sec. | Acres | MBM | | | | | | |
| 1 | 1 | 43N | 2W | 34 | 400 | 6.0 | X | None | | <u>1</u> | | |
| | | 42N | 2W | 4 | 100 | 1.0 | | | | | | |
| | | | | | 500 | 7.0 | | | | | | |
| 2 | 2 | 42N | 2W | 4 | 406 | 4.0 | X | 21 | 3 1/4 | | | |
| | | | | 6 | 379 | 2.7 | | | | | | |
| | | | | 8 | 320 | 0.6 | | | | | | |
| | | | | | 1105 | 7.3 | | | | | | |
| 3 | 3 | 42N | 2W | 12 | 160 | 0.2 | X | 31 32 33 | 2 1/2 | | | |
| | | 43N | 1W | 32 | 180 | 0.5 | | | | | | |
| | | 42N | 1W | 6 | 462 | 2.4 | | | | | | |
| | | 43N | 1E | 1 | 80 | 0.1 | | | | | | |
| | | | | 11 | 80 | 0.3 | | | | | | |
| | | | | 12 | 160 | 0.3 | | | | | | |
| | | 44N | 3E | 21 | 240 | 0.6 | | | | | | |
| | | | | 22 | 200 | 0.6 | | | | | | |
| | | | | 28 | 320 | 0.4 | | | | | | |
| | | | | 31 | 320 | 0.5 | | | | | | |
| | | | | 32 | 640 | 0.4 | | | | | | |
| | | | | 33 | 100 | 0.1 | | | | | | |
| | | | | | 2942 | 6.4 | | | | | | |
| 4 | 4 | 42N | 2W | 2 | 522 | 2.2 | X | 41 | 4 1/4 | | | |
| | | | | 12 | 300 | 0.5 | | | | | | |
| | | 42N | 1W | 18 | 440 | 2.4 | | | | | | |
| | | | | 20 | 580 | 2.3 | | | | | | |
| | | | 1842 | 7.4 | | | | | | | | |
| 5 | 5 | 42N | 2W | 10 | 600 | 0.8 | X | 51 52 | 3 1/4 | | | |
| | | | | 14 | 360 | 0.8 | | | | | | |
| | | | | 24 | 640 | 5.1 | | | | | | |
| | | | | | 1600 | 6.7 | | | | | | |

1/ Only proper proportion chargeable against government stumpage.



GOOSE NEST WORKING CIRCLE

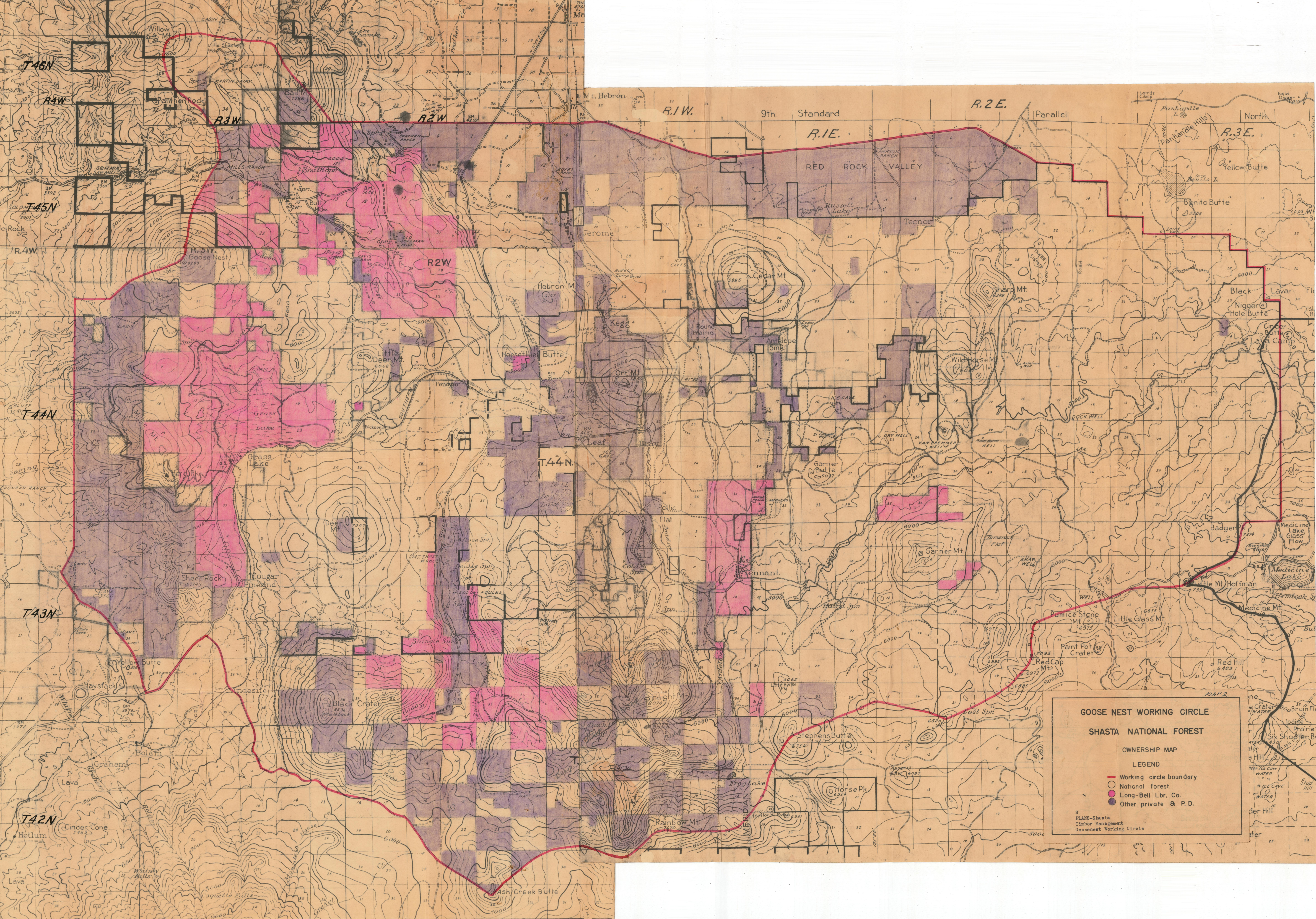
SHASTA NATIONAL FOREST

TYPE MAP

LEGEND

- Working circle boundary
- Non commercial
- Less than 5% stocked
- Fir
- Mixed conifer
- Pine

S
PLANS-Shasta
Timber Management
Goose Nest Working Circle



GOOSE NEST WORKING CIRCLE

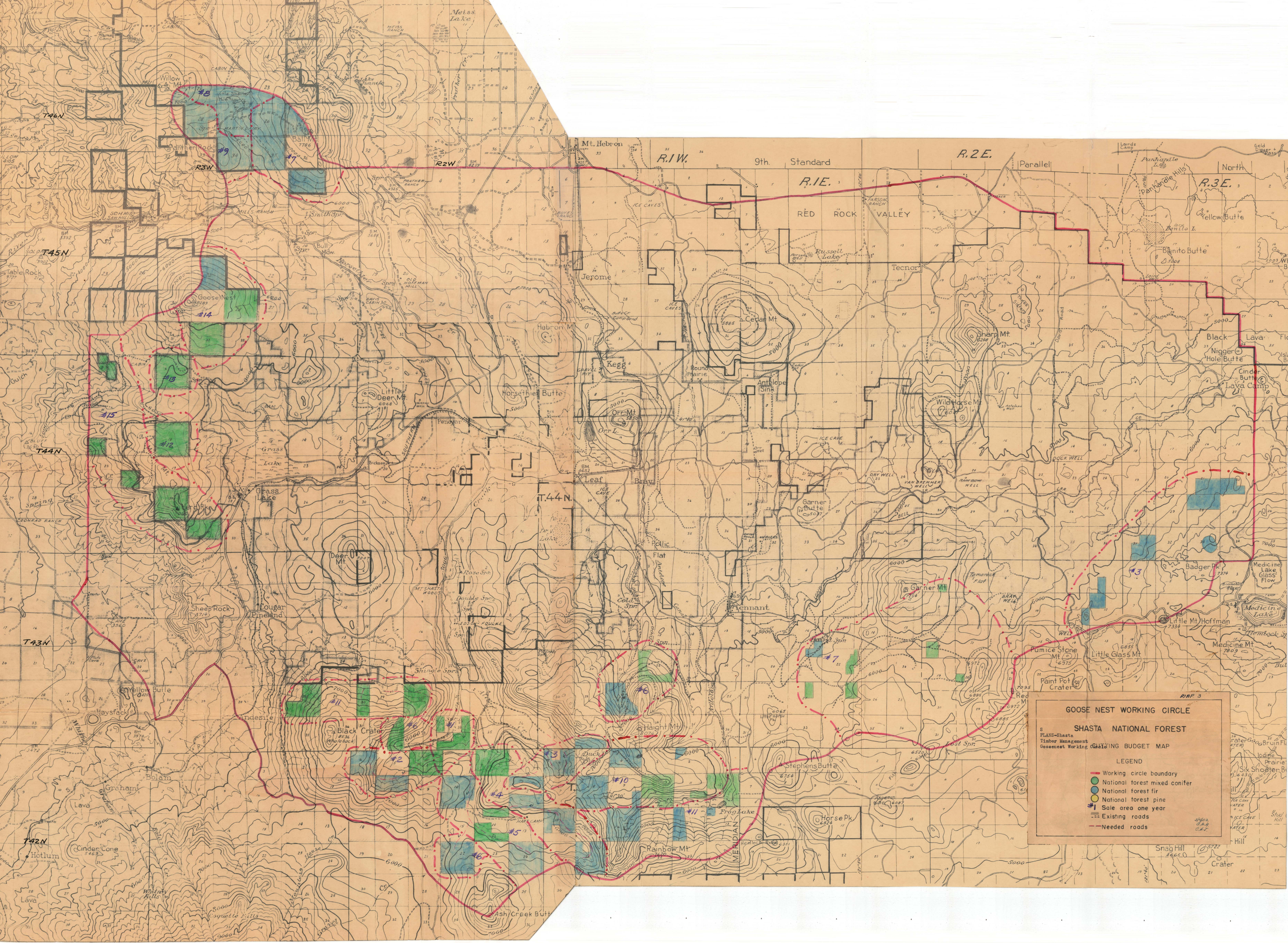
SHASTA NATIONAL FOREST

OWNERSHIP MAP

LEGEND

- Working circle boundary
- National forest
- Long-Bell Lbr. Co.
- Other private & P.D.

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Goose Nest Working Circle



GOOSE NEST WORKING CIRCLE

SHASTA NATIONAL FOREST

8 PLANS-Shasta
Timber Management
Goose Nest Working Circle

ESTIMATING BUDGET MAP

LEGEND

- Working circle boundary
- National forest mixed conifer
- National forest fir
- National forest pine
- Sale area one year
- Existing roads
- Needed roads

SH-52
J.B.H.
C.H.T.